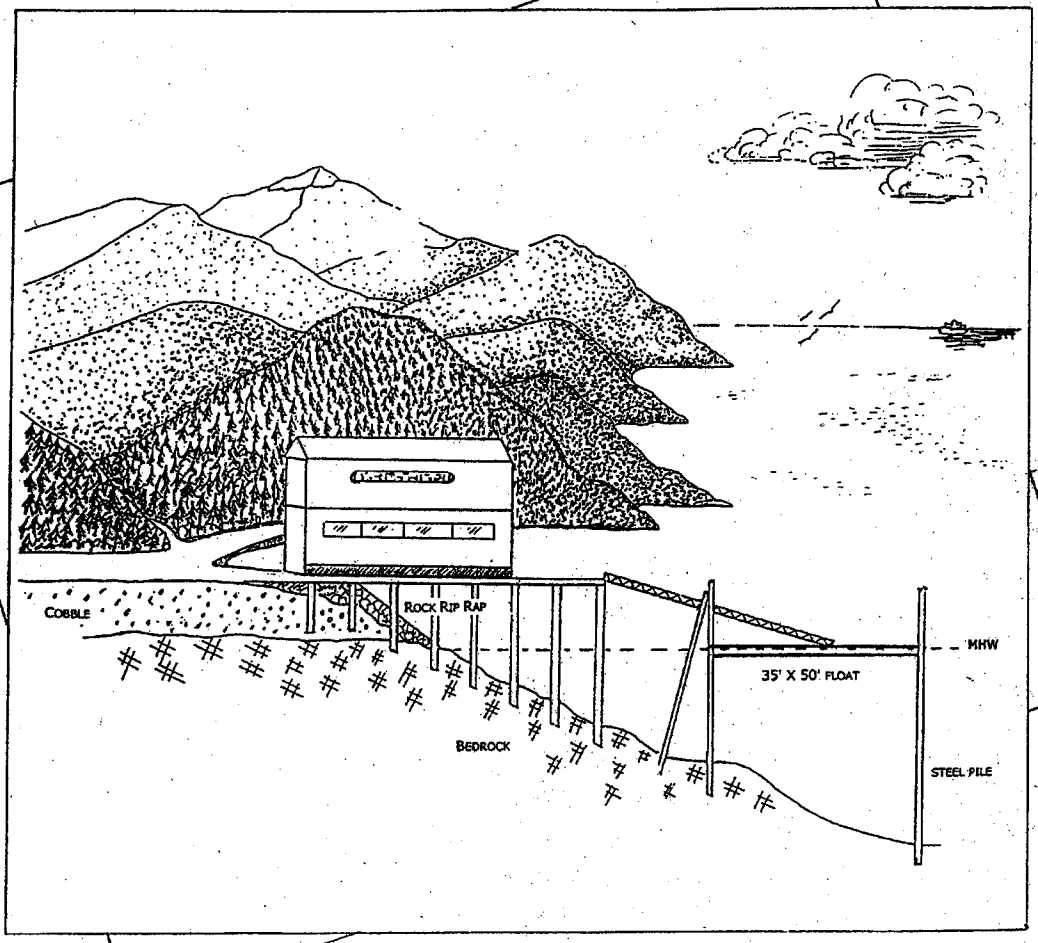
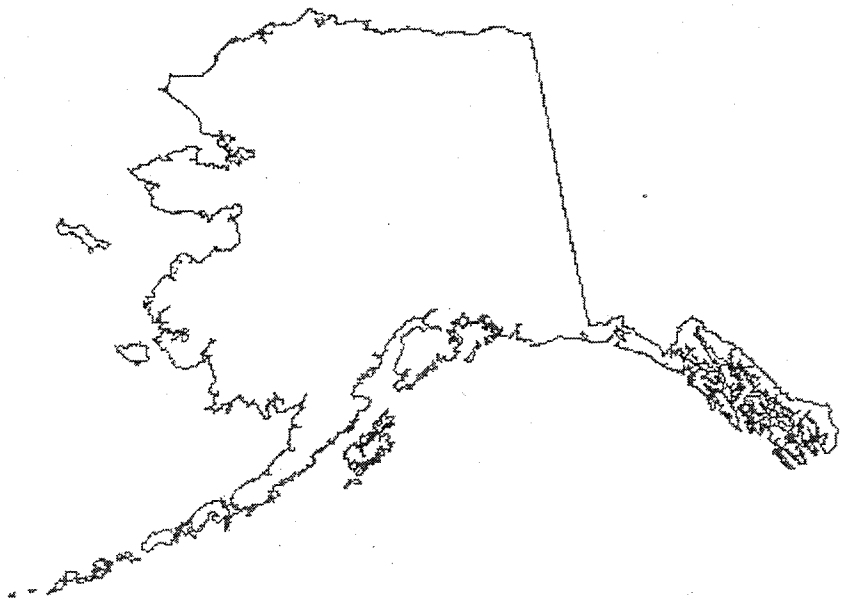
ARMY CORPS OF ENGINEERS



GUIDE TO PERMIT DRAWINGS

PURPOSE

THIS HANDBOOK WILL HELP YOU PROVIDE THE CORPS OF ENGINEERS WITH ACCURATE DRAWINGS OF YOUR PROPOSED PROJECT. CAREFUL REVIEW OF THE ENCLOSED INSTRUCTIONS WILL ELIMINATE TIME SPENT IN OBTAINING INFORMATION FROM YOU ABOUT YOUR PROJECT AND SPEED PROCESSING OF YOUR APPLICATION.

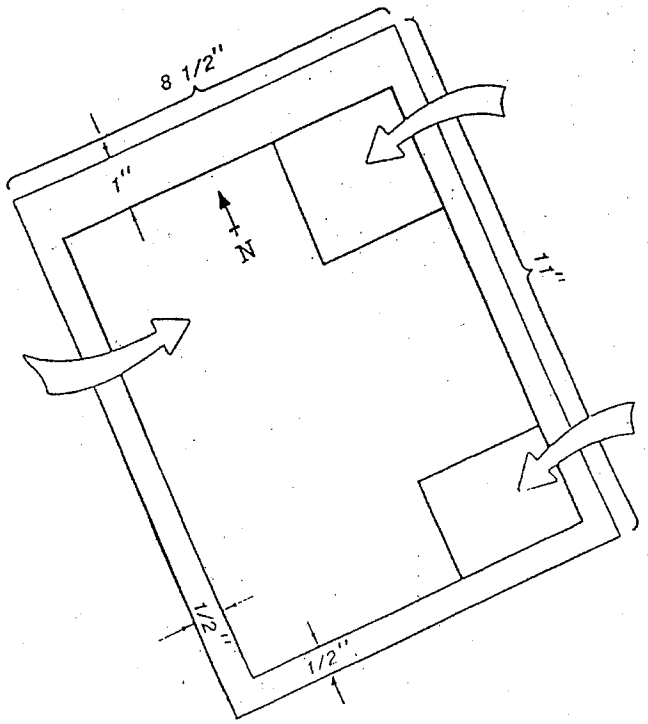


PREPARED BY S. HITCHCOCK
JUNEAU REGULATORY FIELD OFFICE
1993, 1996, 1999

CONTENTS

CHECKLIST FOR DRAWINGS

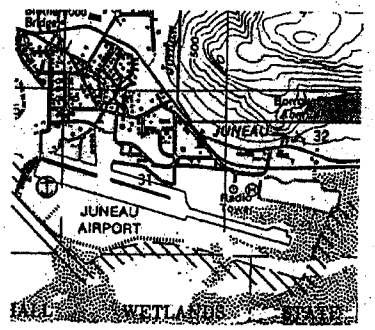
- IT IS NOT NECESSARY TO HAVE YOUR DRAWINGS PROFESSIONALLY DRAFTED PROVIDED THEY ARE CLEAR AND EASILY UNDERSTOOD. HOWEVER, LARGE COMPLEX PROJECTS SHOULD ALWAYS BE DRAFTED.
- THE DRAWINGS WILL BE PHOTOCOPIED. PLEASE USE BLACK AND WHITE IF POSSIBLE. IF THERE IS ANY SHADING TO BE DONE, USE CROSSHATCHING OR OTHER SIMILAR GRAPHIC SYMBOL.
- LIMIT THE NUMBER OF DRAWINGS TO THE MINIMUM NECESSARY TO ADEQUATELY DESCRIBE THE PROPOSED WORK.
- PRINT ALL INFORMATION SUPPLIED ON DRAWINGS.
- LEAVE A 1" MARGIN AT THE TOP OF EACH PAGE.
- EACH DRAWING MUST INCLUDE A NORTH ARROW.
- ALL DRAWINGS MUST INCLUDE A TITLE BLOCK AND VICINITY MAP.



THE VICINITY MAP

THE VICINITY MAP SHOULD BE REDUCED SO THAT IT WILL FIT INTO THE UPPER RIGHT HAND CORNER OF EACH DRAWING. YOUR LOCAL REGULATORY FIELD OFFICE CAN ASSIST YOU IN OBTAINING THESE MAPS.

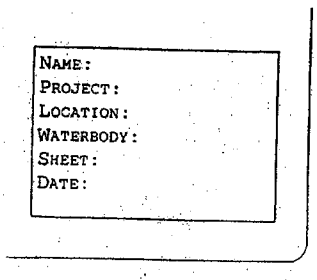
- USE ARROWS AND/OR CIRCLES TO IDENTIFY THE SPECIFIC AREA OF THE PROJECT.
- THE SECOND PAGE VICINITY MAP CAN BE A LOCAL CITY MAP OR SUBDIVISION MAP.
- INCLUDE A NORTH ARROW.



THE TITLE BLOCK

THE TITLE BLOCK SHOULD BE LOCATED IN THE LOWER RIGHT HAND CORNER OF YOUR DRAWINGS. IT SHOULD INCLUDE THE FOLLOWING INFORMATION:

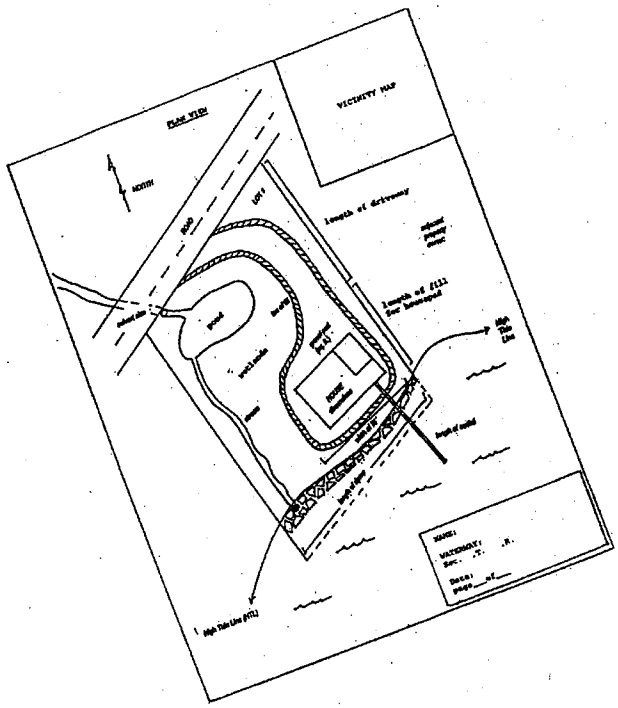
- NAME OF THE APPLICANT
- PROJECT NAME (CITY DOCK, PRIVATE BOAT RAMP, HOUSE PAD).
- PROJECT LOCATION. (SECTION, TOWNSHIP, RANGE, NEAREST TOWN).
- WATERBODY NAME (GASTINEAU CHANNEL, MENDENHALL RIVER).
- DATE THE DRAWING WAS PREPARED.
- SHEET NUMBER/TOTAL NUMBER OF SHEETS (SHEET 1 OF 3).



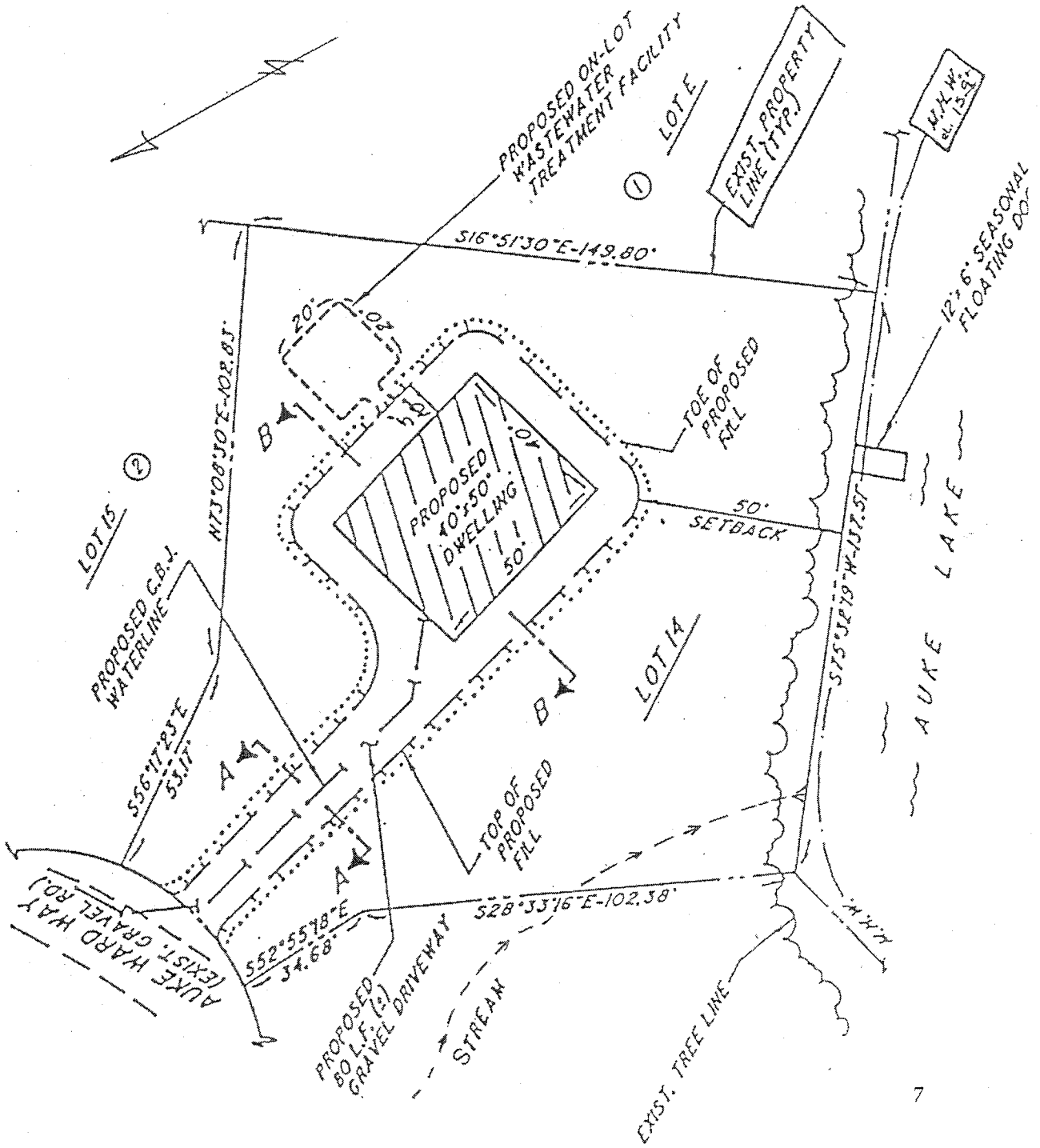
THE PLAN VIEW

THE PLAN VIEW DRAWING SHOWS THE PROPOSED PROJECT AS IT WOULD BE SEEN FROM THE AIR. THE FIRST DRAWING SHOULD IDENTIFY THE BASIC PROJECT FOOTPRINT. OUTLINE THE BASIC SHAPES AND KEEP IT SIMPLE. INDICATE PROPORTIONS AS ACCURATE AS POSSIBLE, AND INCLUDE THE FOLLOWING INFORMATION:

- DIMENSIONS OF THE PROPOSED WORK OR STRUCTURES TO BE PERMITTED.
- INDICATE THE AREA TO BE FILLED USING CROSSHATCHING, DOTS, OR OTHER GRAPHIC SYMBOL.
- INDICATE PROPERTY BOUNDARIES AND ADJACENT PROPERTY OWNERS.
- INDICATE TOTAL SQUARE FOOTAGE OF WETLANDS OR OTHER WATERS OF THE U.S. TO BE FILLED.
- LABEL THE EXISTING HIGH TIDE LINE (HTL), GENERALLY THE DEBRIS LINE.
- SHOW STREAMS, DRAINAGES, AND CULVERTS, IF ANY.
- INDICATE THE DIRECTION OF TIDAL EBB AND FLOW OR FLOW IN RIVERS AND STREAMS.
- INCLUDE LOCATIONS OF OTHER DOCKS, BUOYS, OR OTHER NEARBY FACILITIES.
- LABEL EROSION CONTROL PLANS OR DEVICES TO BE USED.
- INDICATE ANY TEMPORARY STORAGE AREAS OR DISPOSAL SITES TO BE USED FOR SIDE-CAST MATERIALS.
- SHOW THE GRAPHIC SCALE OR NUMERIC DIMENSIONS.
- INCLUDE A NORTH ARROW.



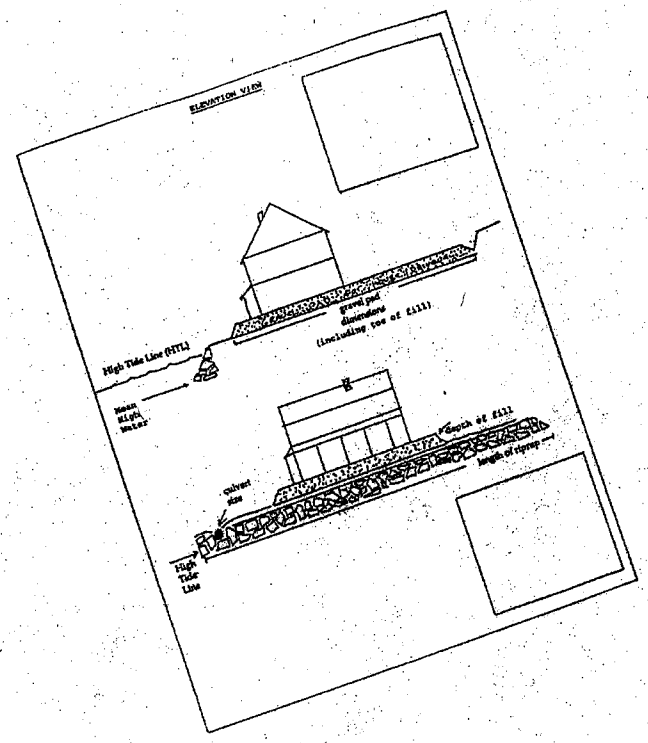
Typical Residential Plan View



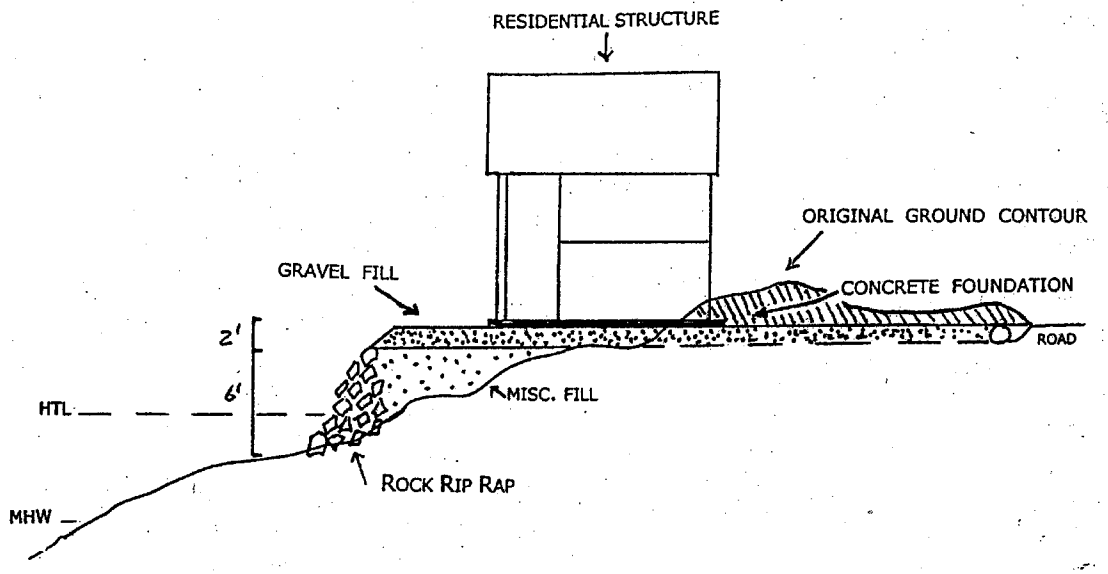
THE ELEVATION VIEW

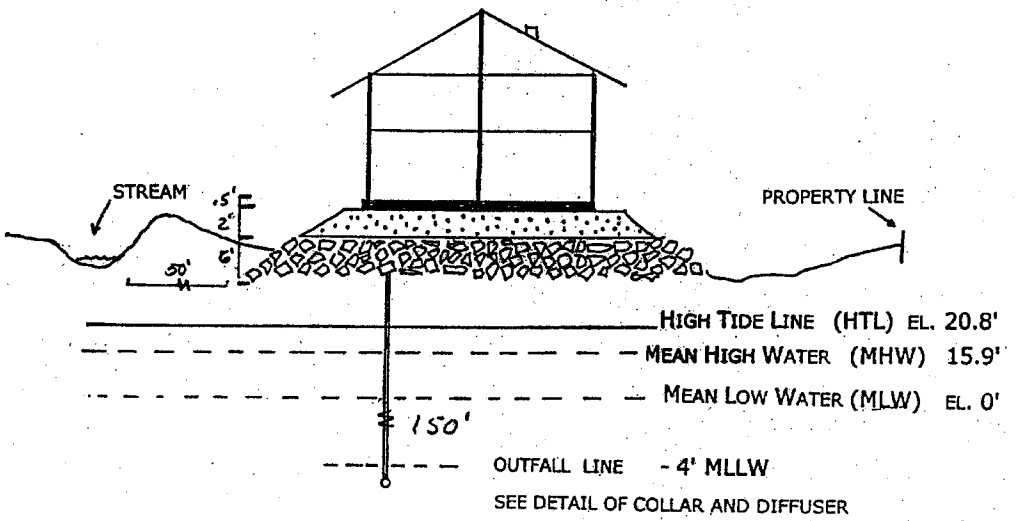
THE ELEVATION VIEW SHOWS A CROSS SECTION OF THE PROJECT AS VIEWED FROM THE SIDE. SEVERAL SECTION VIEWS MAY BE NECESSARY TO SHOW THE ENTIRE PROJECT AREA. THEY SHOULD INCLUDE THE FOLLOWING INFORMATION:

- SLOPE OF THE LAND
- OUTLINE AND GRAPHICALLY INDICATE THE FILL AREA AND LABEL THE DEPTH AND WIDTH. DO NOT FORGET TO INCLUDE THE TOE OF THE SLOPE.
- INDICATE THE TYPE OF FILL MATERIAL TO BE USED.
- INDICATE THE DISTANCE TO WATERBODIES, WIDTH OF ROAD CROSSINGS, CULVERT SIZES, AND OTHER DIMENSIONS.
- INDICATE THE TIDAL ELEVATIONS, IF APPLICABLE (HTL, MHW, MLW).
- PROVIDE AN OUTLINE OF THE PROPOSED STRUCTURES.
- DO NOT FORGET THE NORTH ARROW AND SCALE.

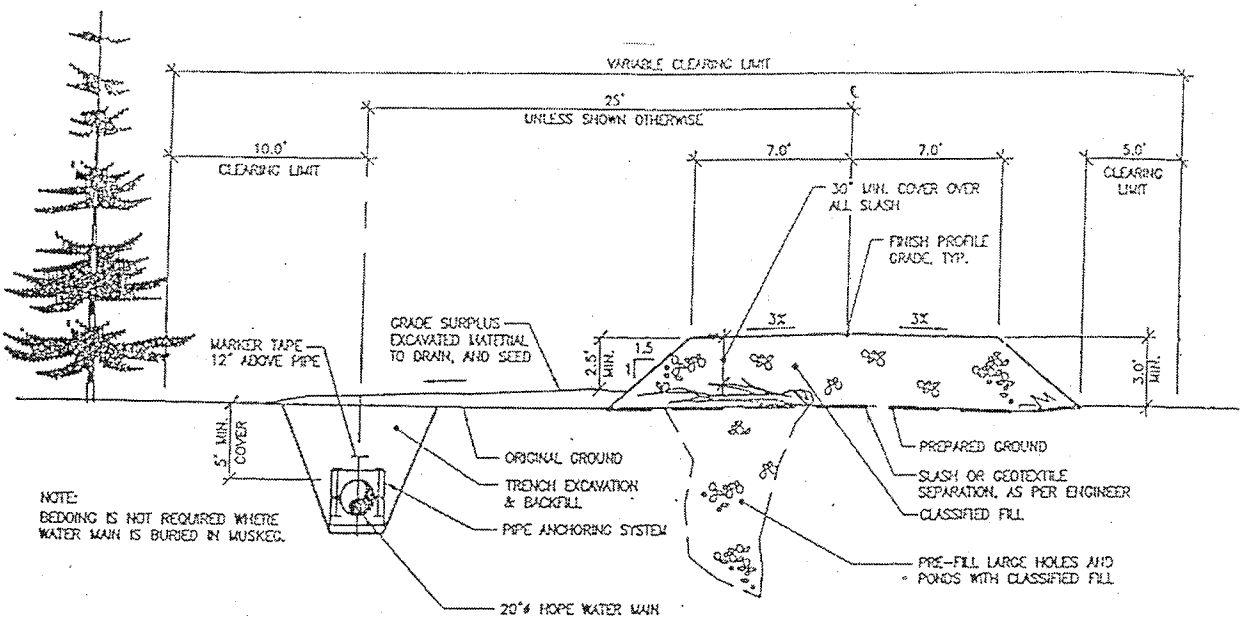


Typical Elevation View Drawings

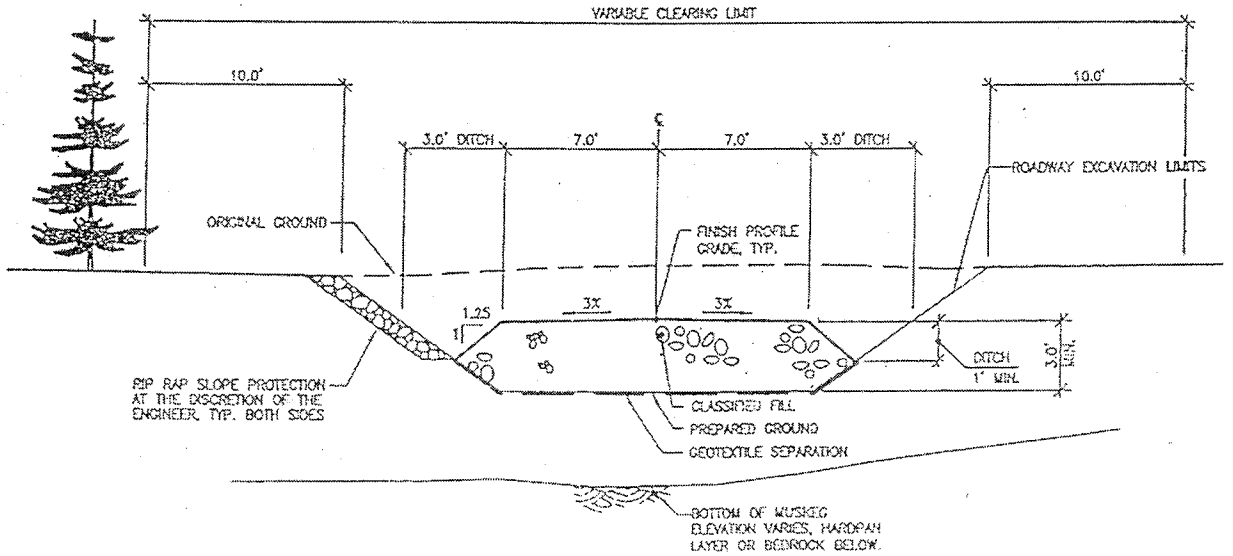




Typical Road Section Views

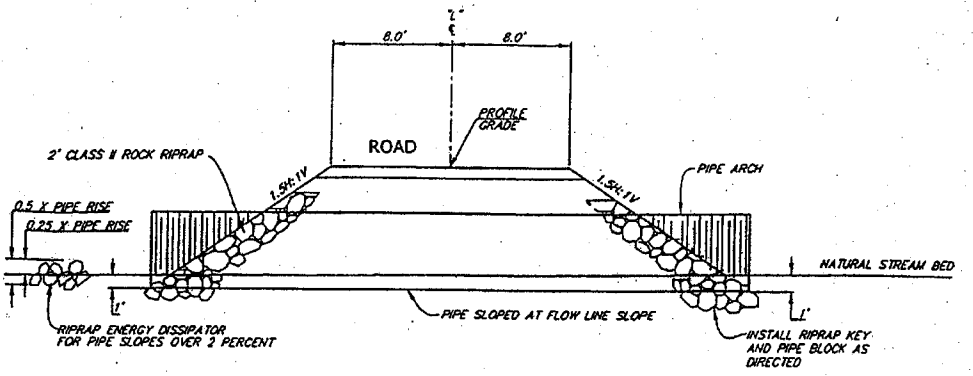


TYPICAL SECTION - ROADWAY FILL

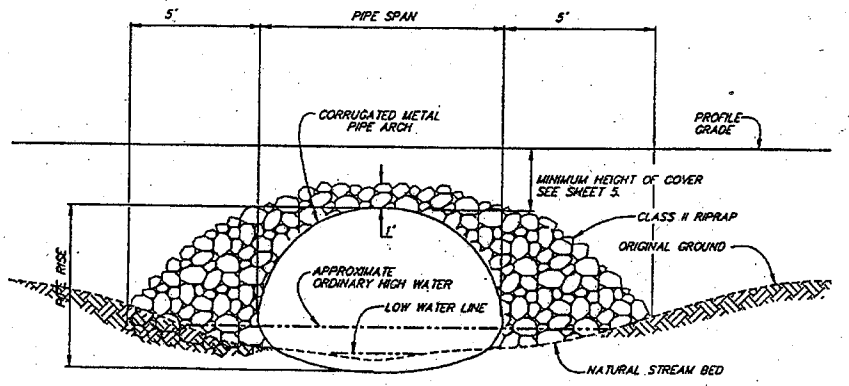


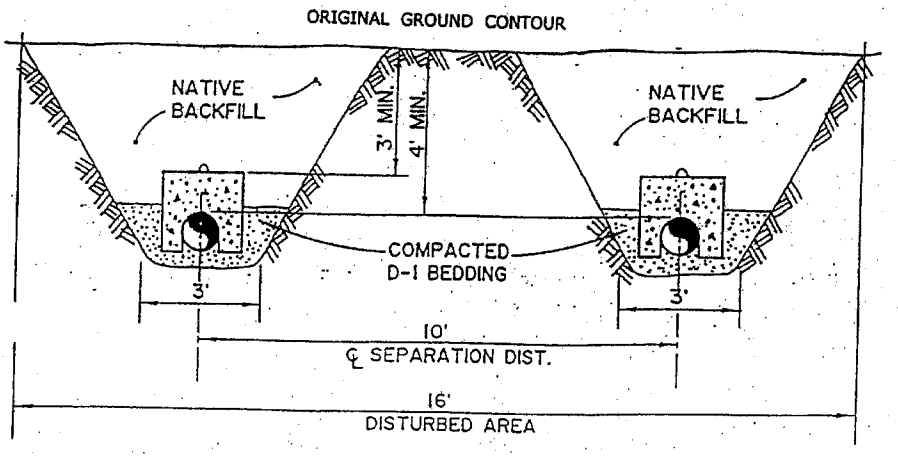
TYPICAL SECTION - ROADWAY CUT

Culvert and Drainage Section Views

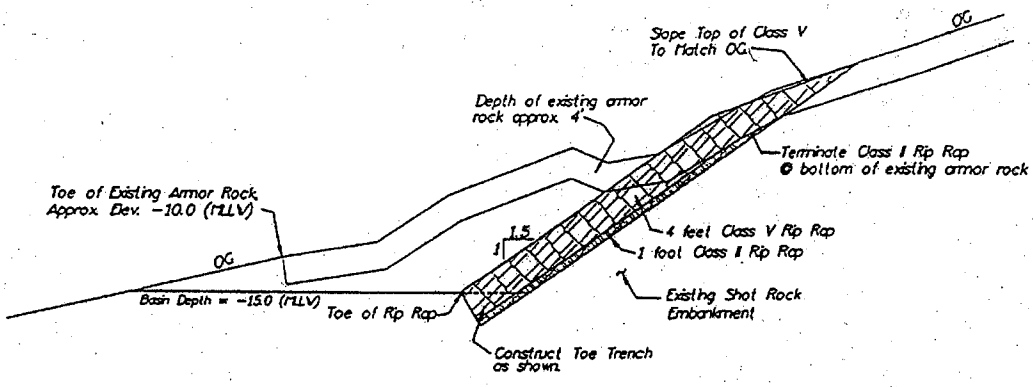


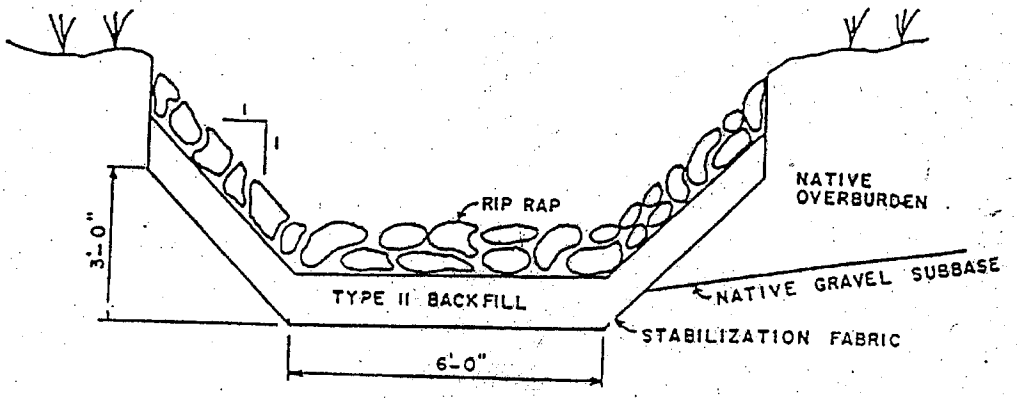
ARCH TYPE CULVERT

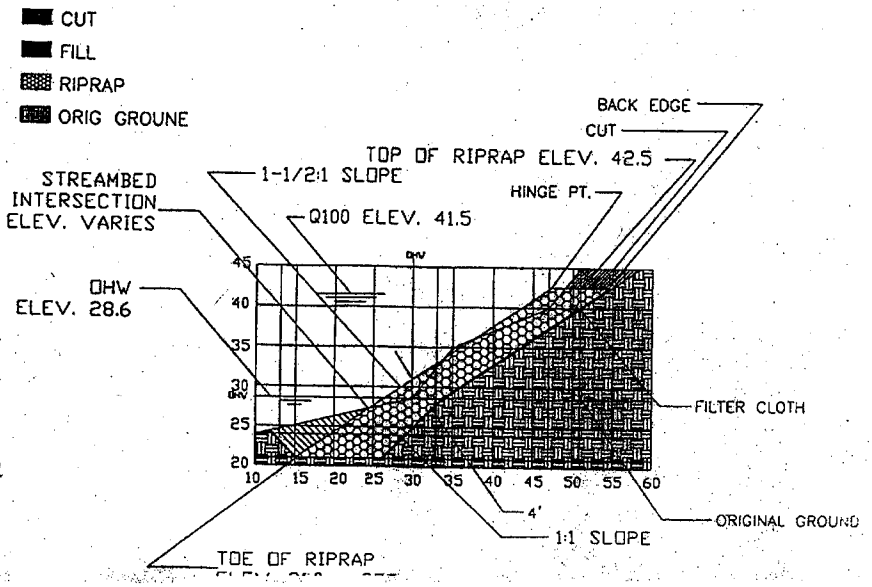




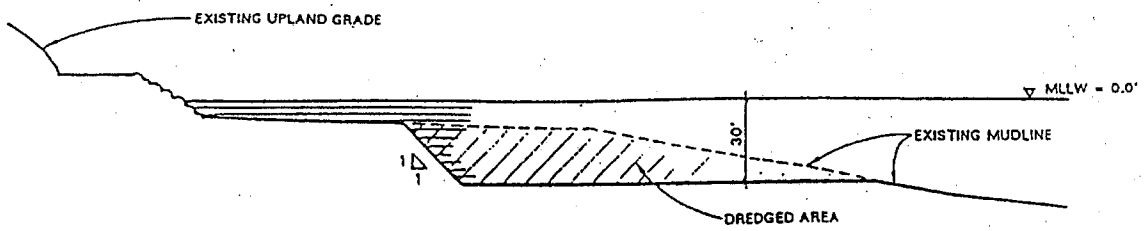
Bank Stabilization

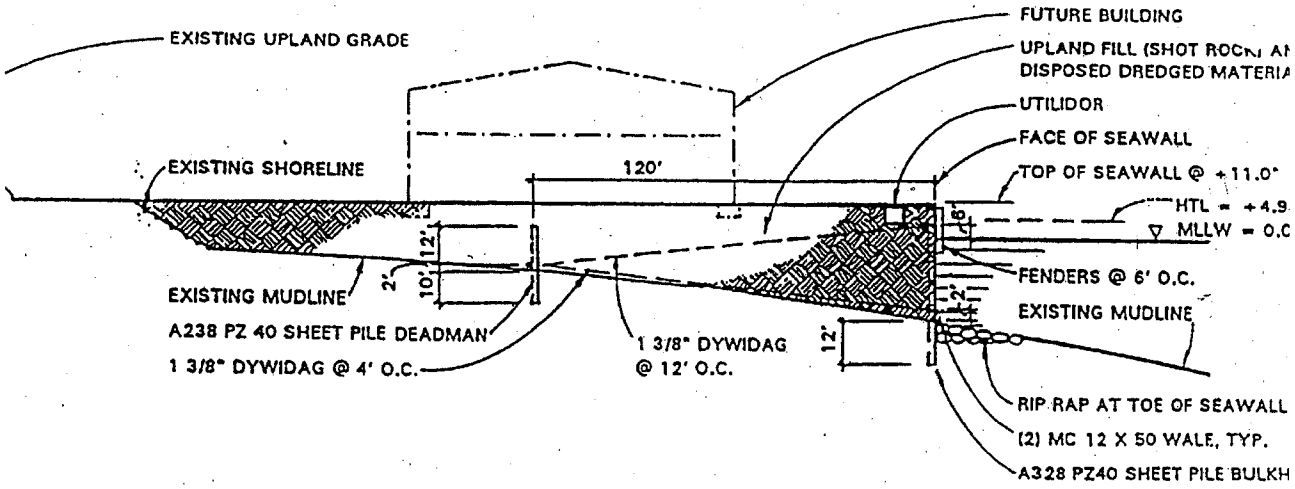


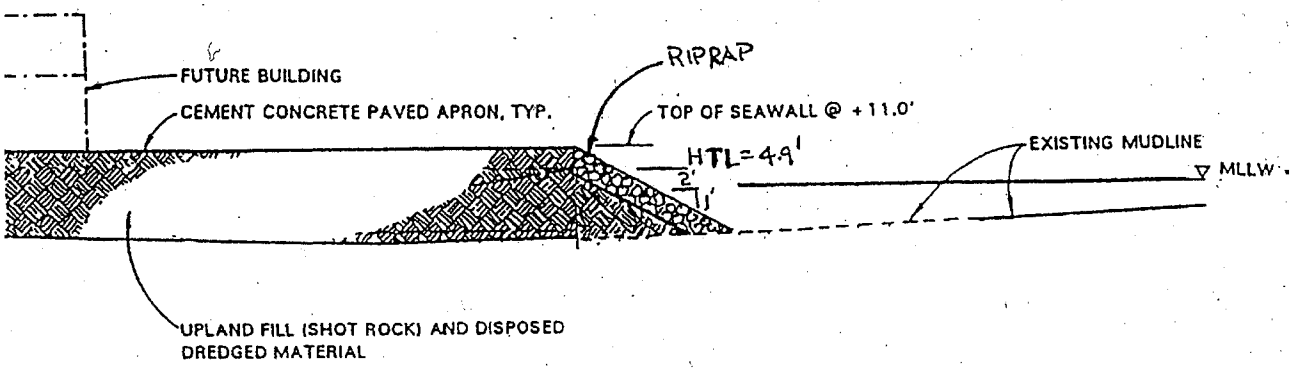




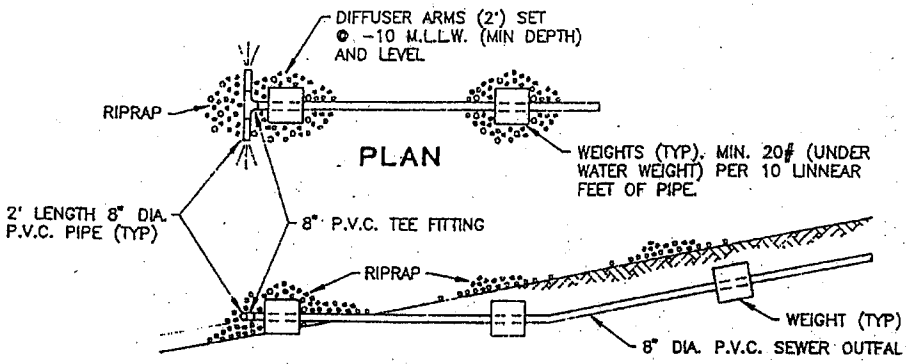
Coastal Projects





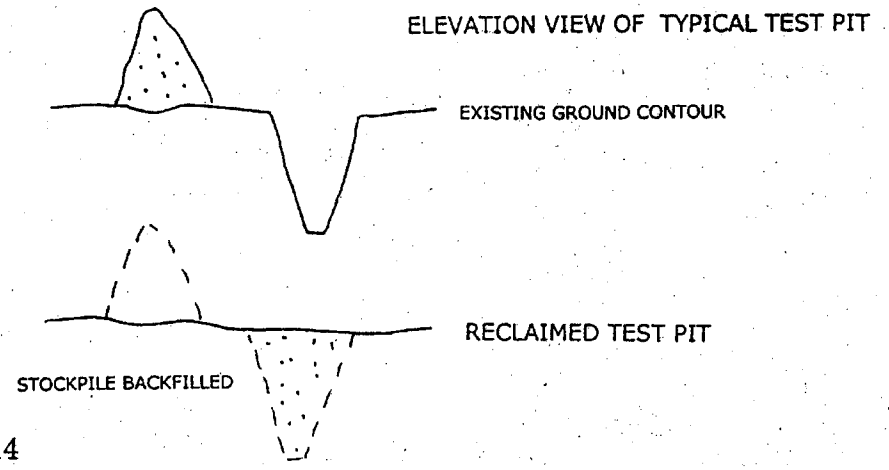


OUTFALL TERMINUS DIFFUSER DETAIL

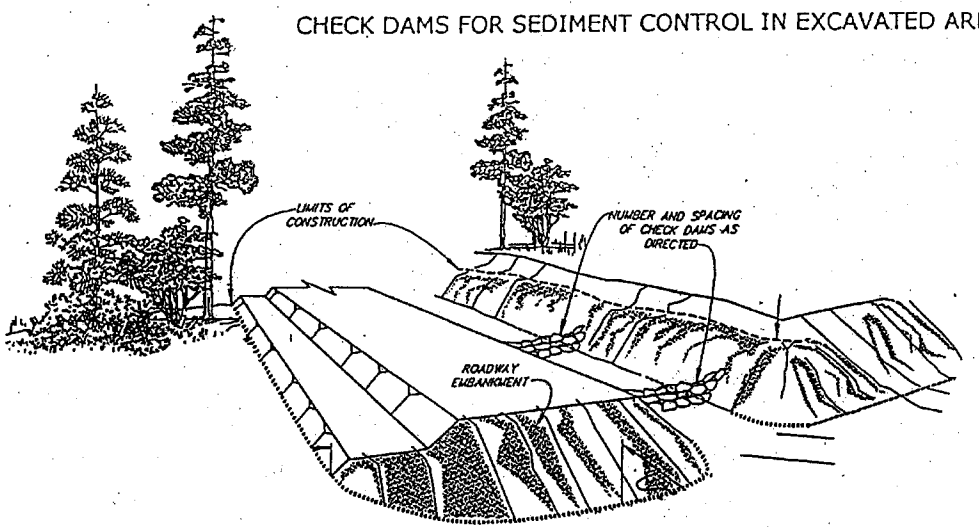


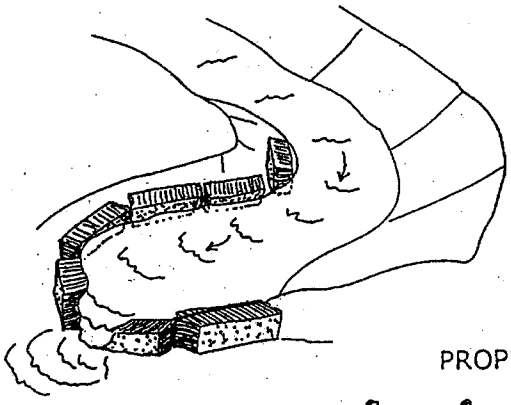
OCEAN OUTFALL:

CONNECT THE SEWAGE SYSTEM TO AN 8" PVC OR HDPE OUTFALL, WHICH DISCHARGES TO MARINE WATERS AT TANANI BAY AS SHOWN ON THE DRAWING. EXTEND THE OUTFALL TO A DEPTH OF AT LEAST 10 FT. MEAN LOWER LOW WATER AND PROTECT THE PIPE AGAINST EROSION BY WAVES AND CURRENT BY BURYING AT LEAST 4 FT. ACROSS THE BEACH AND AT 2 FOOT DEPTHS BELOW -4 M.L.L.W.. PLACE RIP RAP OVER THE OUTFALL TERMINUS AT A DIFFUSER SECTION AS SHOWN IN THE DETAIL IN THE DRAWING. PLACE CONCRETE WEIGHTS ON OUTFALL WITH AT LEAST ONE WEIGHT ON EACH LINE SEGMENT. MORE THAN ONE WEIGHT PER SEGMENT SHOULD BE PLACED ON THE OUTFALL TERMINUS. MIN 20# (UNDERWATER WEIGHT) PER 10 LINNEAR FEET OF PIPE. CONCRETE WEIGHTS 64#/CU. FT. LESS UNDERWATER THAN ABOVE WATER, OR ABOUT 1/2 THE WEIGHT IN AIR.



CHECK DAMS FOR SEDIMENT CONTROL IN EXCAVATED AREAS

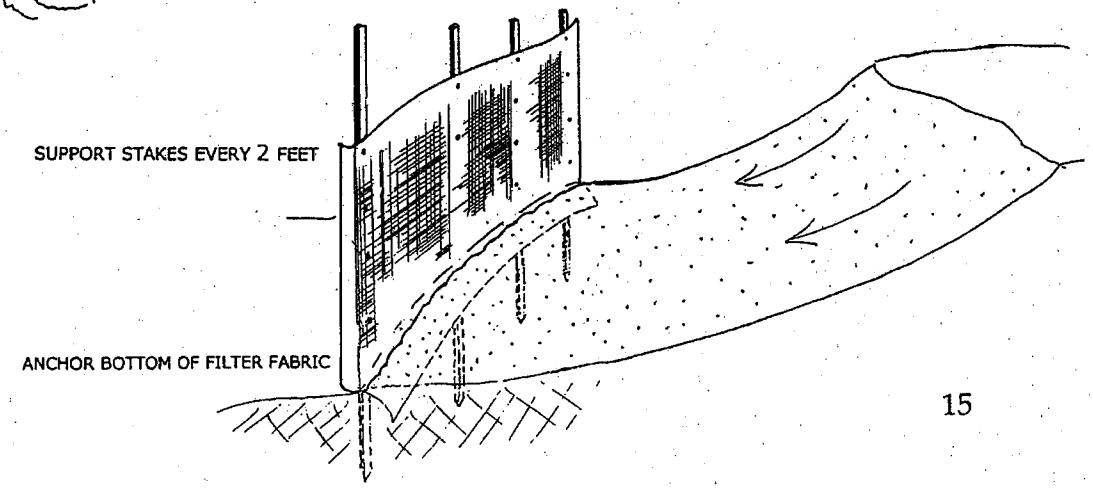




USE OF HAY BALES

FOR SEDIMENT CONTROL STRUCTURES

PROPER INSTALLATION OF SILT FENCING



Name:

Location:

Waterway:

COE #

Date:

Sheet of